**K-5 Math Lesson Plan**

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| **Teacher: Sams** | | | **Grade: 5th** | | | **Date(s)**: |
| **Unit Title:** Unit 1-Understanding the Decimal Place Value System | | | | **Corresponding Unit Task:** Taught before performance task 1. | | |
| **Essential Question(s):** How many different ways can a number be written? | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  -anchor chart (x3)  -student pairs for independent time  -assortment of markers  -meeting area for students (not their desks)  -timer (online if practical) | | **Student:**  -jobs (1 per pair to use)  -1 piece of white construction paper (large 11 x 14)  -2 markers  -access to decimal manipulatives (i.e. fake money, newspapers, magazines etc.) | | | Expanded form, number name, place value | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  5.NBT.3a  *Read and write decimal numbers to thousandths using base-ten, number name, expanded form.* | | | | | |
| **I Can Statement(s):**  -I can read decimals to the thousandths using number names.  -I can read decimals to the thousandths using expanded form.  -I can write decimals to the thousandths using number names.  -I can write decimals to the thousandths using expanded form. | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)  5-10 minutes  -call students to the meeting area (not their desks)  -Write the following question on the anchor chart🡪Burning question of the day-Why should I care about how numbers can be written and read?  -give students 30 seconds of private think time and then ask them to turn “knee to knee and eye to eye” with someone near them. Then ask them to take turns sharing their answers with each other to the burning question. Repeat this step once.  -After allowing the children to share with 2 different peers, redirect their attention back to the anchor chart and illicit responses from the students. Record each student response and ask explain their response. \*\*asking probing questions as needed (i.e. Why?, what made you think that way?, is there anything else you could think of?, could you clarify for us?)\*\*  -Segway into the teacher directed section by sharing why I think it people should care🡪My reason-so people do not get cheated out of their hard earned money. | | | | | |
| **Teacher Directed:**  10 minutes  Tell the students a real story about a bank teller’s mistake with my money. The story goes as follows: *So kids are you wondering why I said you should care about reading and writing decimals…well listen to what happened to me. I was 22 years old and I have just gotten my first paycheck. I took my paycheck to the bank to deposit it. When I got to the bank I couldn’t remember my account number so the teller to me that they would fill out a deposit slip for me if I could just read them the amount of money that I was going to deposit. So I read to the teller “two thousand, twenty two dollars and nine cents.” The teller completed the transaction and I was on my way. I never in my wildest dreams thought that there would be a problem with my first big check. So the next day I was going to go out and grocery shop but I thought that I would check to see if my check had showed up in my account yet. I went online and my check had shown up but there was a MAJOR problem…this (write this on a new anchor chart) “222.09” is what was shown as being deposited.”*  -stop story right here and ask students what the problem was🡪the teller had just entered the numbers they heard disregarding place value.  -On that same sheet of chart paper write Bank Teller and write “place value of decimals and whole numbers” under “Teller.” Explain to students this is something that the teller needed to know to complete my transaction correctly. Then ask them if there is any more decimal related math that a teller would need to know. Give students 1 minute to discuss this then bring the group back together and ask them to share/record their responses.  \*\*if students do not bring up the idea of needing to understand expanded form bring that up and show how that would have helped my bank teller.\*\*  \*\*also if students do not bring up examples of the teller using decimal numbers to the thousandths, give the following example🡪A customer wanted to teller to divide $25 into 8 equal parts. The teller would have to be able to tell the person that would be $3.125 (which is not possible with our money system). Then the teller would have to figure help the customer figure out how to give each person $3.12 and then have .04 left over.\*\* | | | | | |
| **Guided Practice:**  5-10 minutes  -Write the job “Cashier” on chart paper. Ask the students to turn “knee to knee and eye to eye” and brainstorm decimal information they would need to know in order to do their job.  -after 2 minutes ask each pair of students to share what they discussed as math needs for the cashier. Record student responses and ask probing questions as needed.  -also have the students give specific number examples as they share their ideas. Record these numbers in the form that the cashier would need to use the number (some numbers the cashier will need to use in standard or number form, sometimes they would need to use expanded form🡪example: (if a cashier needed to give change that involves expanded form. So an example students might write is “gives change🡪$23.41=20.00 + 3.00+ .40 + .01)) | | | | | |
| **Independent Practice:**  20-25 minutes  -Break students into heterogeneous groups (typically I do homogenous groups but on an introduction lesson like this, heterogeneous groups work very well)  -Give each group a job and a sheet of white construction paper (large size).  -Each pair is responsible for writing their job at the top of their paper and then list all of the ways their job uses reading and writing decimals. They should also include examples for each way their job would use decimals numbers in the correct form the job would use the number. (if a cashier needed to give change that involves expanded form. So an example students might write is “gives change🡪$23.41=20.00 + 3.00+ .40 + .01”, or “read the price of an item to a customer🡪 $4.51 four dollars and fifty one cents”) -be sure to let the students know that they have access to things like newspaper, magazines, fake money etc. if these items will help them in their brainstorming. | | | | | |
| **Closing/Summarizing Strategy:**  5-10 minutes  For the last five minutes of the lesson bring the whole class back together and have each group look at their job and pick the two most important things they wrote about their job. Ask each group to share their job and their two important things.  -post the students’ work in the room for further viewing later. | | | | | |
| **Differentiation Strategies** | | | | | | |
| **Extension** | | | **Intervention** | | | **Language Development** |
| -Heterogeneous grouping-students have to teach other students which extends mastery | | | -Heterogeneous grouping-this allows students to build on what the know with the assistance of a peer that will be using “kid language” | | | -Heterogeneous grouping-this allows students to build on what the know with the assistance of a peer that will be using “kid language”  -give jobs that would be unique to their country/language to allow them to use their background knowledge |
| **Assessment(s):**  Informal Assessment🡪Construction paper with information, conversation in whole group and in pairs while working independently.  -reflect on any notes made about students during the lesson | | | | | | |
| **Teacher Reflection:** (Next steps?)  -What went well?  -Did the students connect the jobs to the use of decimals? If not why?  -Students misconceptions/understandings  -What do I need to watch for/possibly reteach in the following lessons? | | | | | | |